

Name: \_\_\_\_\_

### p1029: Combine Like Terms (v17)

#### Example

Combine like terms.

$$9x + 7x^2 + 6 - 7x - 2x - 4 + 3 + 8x^2 - 9x^2 - 3x$$

#### Answer

Combine the quadratic terms.

$$7x^2 + 8x^2 - 9x^2 \equiv 6x^2$$

Combine the linear terms.

$$9x - 7x - 2x - 3x \equiv -3x$$

Combine the constant terms.

$$6 - 4 + 3 \equiv 5$$

The final result:

$$6x^2 - 3x + 5$$

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#### Question 1

Combine like terms.

$$2x^2 + 5x^2 - 8x - 5 - 4 - 9x - x - 6 + x^2 + 9x$$

$$8x^2 - 9x - 15$$

**Question 2**

Combine like terms.

$$4x - 9x^2 - 8 - 2 + 9x^2 - 6 + 5x + 2x^2 - 4x - 5$$

$$2x^2 + 5x - 21$$

**Question 3**

Combine like terms.

$$-x^2 + 7x^2 - 7 + x - 2 + 4x^2 + 6x + 3x + 5 - 6x$$

$$10x^2 + 4x - 4$$

**Question 4**

Combine like terms.

$$7x + 1 - 3 - 7x^2 + 2x + 6x^2 + 9x - x^2 - 4 - 5x^2$$

$$-7x^2 + 18x - 6$$